SUBSTITUTE SPECFICATION

SN. 10/800,408

way

COMBINED STRUCTURE OF FRONT PART OF CABIN OF AUTOMOBILE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is based upon and claims the benefit of priority from prior Japanese Patent Application No. 2003-066719, filed March 12, 2003, the entire contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a combination structure of a front part of a cabin of an automobile, and a combining method.

2. Description of the Related Art

An automobile has a dash panel, a cowl side panel, a hinge pillar (a front pillar), a side member, and a cross member, in the structure of front part. Refer to, for example, FIG. 1, FIG. 3 and FIG. 13 of Jpn. UM Registration No. 2531718. The dash panel is placed in the front part of a cabin crossing the width direction of the automobile. The cowl side panel is joined to the left and right sides of the dash panel, and extended rearward.

The front pillar is joined to the rear end of the cowl side panel, forming a closed section against the cowl side panel. Each of left and right side members is joined to the dash panel at a position more inside than a front pillar, and placed forward from the dash panel. The cross member forms a closed section against the dash panel, and placed in the width direction of a body, connecting the rear end of the side member.

When the cross member is attached the dash panel from inside of the cabin, both ends of the cross member is bent rearward along the dash panel and cowl side panel, and joined to the front pillar. When the cross member is attached the dash panel from outside of the cabin, both ends of the cross member are joined to the side member. A reinforcing member is fit along the dash panel and cowl side panel, between the front pillar and the inside of the cabin of the dash panel at the position fit with the side member.

However, in the above structure, the flange combining the dash panel and cowl